



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,536	06/11/2001	Paul Patrick	BEAS-01084US0	4065
23910	7590	08/26/2005	SRM/KFK	
FLIESLER MEYER, LLP FOUR EMBARCADERO CENTER SUITE 400 SAN FRANCISCO, CA 94111			EXAMINER PICH, PONNOREAY	
			ART UNIT 2135	PAPER NUMBER

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/878,536

Applicant(s)

PATRICK, PAUL

Examiner

Ponnoreay Pich

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. The previous office action(s) is/are incorporated by reference in its/their entirety. The examiner assumes that the applicant agrees with any well-known prior art statements and/or rejections made by the examiner in the previous office action(s) that were not argued. Any rejections not repeated below for record are withdrawn due to applicant's amendments and/or arguments.

Claims 1, 7, 18, 24, 30, and 35-36 were amended. Claims 1-39 are pending.

#### ***Information Disclosure Statement***

Not all of the items in the IDS submitted on 7/5/2005 were considered as they failed to meet the requirements of CFR 1.98. They failed to meet the requirements because it appears that several sheets of the IDS submitted were mistakenly submitted with the current applicant when they were clearly labeled as belonging to other applications, i.e. 10/122,599 and 10/367,462.

#### ***Response to Amendment***

The examiner has noted applicant's amendments to the claims.

#### ***Response to Arguments***

Applicant's arguments with respect to claim 1-39 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2135

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. As per claim 1, it is unclear what the subject of the verb "comprising" recited on line 2 is. The examiner notes that the subject could be "a security system", "a protected resource or application", or "an application container."
2. Claim 1 recites, "the callback handler" on line 9 and "the output" on line 10, which lacks antecedent basis.
3. Claim 1 recites, "the protected application" on lines 11-12 and "said protected application" on lines 13-14. It is unclear if both refer to the same "a protected application" recited in line 4.
4. As per claim 18, it is unclear what the subject of the verb "comprising" recited on line 2 is.
5. Claim 18 recites, "the security service" on line 6, "the callback handler" on line 11, "the output" on line 14, and "the security providers" on line 14, which lacks antecedent basis.
6. Claim 35 recites "the application container" on lines 7-8 which lacks antecedent basis.
7. Claim 36 recites "said request", "said entitlement", and "the user of said protected resource", which lacks antecedent basis.
8. Any claims not specifically addressed are rejected by virtue of dependency.

Art Unit: 2135

9. Appropriate corrections are required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-2, 5-13, 15-19, 22-30, 32-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiederhold (US 6,226,745) in view of Devine et al (US 6,606,708).

**Claim 1:**

Wiederhold discloses a security system for allowing a client to access a protected resource, comprising:

1. An application interface mechanism for receiving a request from a client to access a protected resource, and communicating said request to a security service (col 4, lines 56-58), wherein the client makes the request on the application container and the application container calls the security service with the request (Fig 2).
2. A security service, i.e. security mediator and security officer, for making a decision to permit or deny said request (col 5, lines 1-10), wherein the security service includes a plurality of security providers that may be plugged into the security service (col 4, lines 7-13 and col 5, lines 34-51).

3. A resource interface for communicating permitted access request to said protected resource (col 4, lines 49-55).

Note that an application interface mechanism for receiving requests from a client application must exist or the mediator disclosed by Wiederhold would not be able to receive/intercept queries related to a protected resource. An application container is an environment in which an application runs. This can include hardware or software. If an application exists, an application container must also exist. Further, as the security mediator is software, the client can only make requests to software via the use of an application and application container.

Wiederhold does not disclose a security system for allowing a client to access a protected resource **or application, said application including an application container**. Wiederhold also does not disclose a protected resource is a **protected application**, the application container calls the security service with the request **and a callback**, wherein the security providers use the callback handler to request context information from the application container for the request, and wherein depending on the output from the security providers the security service determines an entitlement for the client to use with the protected application.

However, Devine discloses a protected resource is an application, said application including an application container (col 27, lines 15-22). Devine also discloses that his invention uses a GUI interface (col 2, lines 60-65), which reads on the use of callback and callback handlers as modern GUI systems uses callback

Art Unit: 2135

programming styles. Devine discloses on Figure 6 a username and password login interface. Further, Devine discloses that the services available to a user once the user logs in depend on the subscription of the user (col 3, lines 32-42). These teachings by Devine reads on the limitation of security providers using a callback handler to request context information from the application container for the request as the user is requested to enter authentication information via a GUI interface so that the system can determine to what services the user is entitled. These teachings also read on the limitation of wherein depending on the output from the security providers the security service determines an entitlement for the client to use with the protected application.

In light of the above teachings by Devine, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified Wiederhold's invention according to the limitations recited in claim 1. One of ordinary skill would have been motivated to incorporate Devine's teachings as he discloses that his teachings would allow for the use of a GUI interface to allow easy and convenient access from the user's perspective (col 2, lines 60-65).

**Claim 18:**

Wiederhold discloses a method of allowing a client to access a protected resource, comprising:

1. Receiving at an application container a request from a client to access a protected resource (col 4, lines 56-58).
2. Communication the request from the application container to the security service (col 4, lines 56-58).

Art Unit: 2135

3. Making a decision at said security service to permit or deny said access request (col 5, lines 1-10), wherein the security service includes a plurality of security providers that may be plugged into the security service (col 4, lines 7-13 and col 5, lines 34-51).
4. Communicating a permitted request to the protected resource (col 4, lines 49-55).

Wiederhold does not disclose the protected resource is an application, said application including an application container. Wiederhold also does not disclose communicating the request from the application container to the security service **together with a callback**. Wiederhold also does not disclose using the callback handler at each security provider to request context information from the application container for the request, determining an entitlement for the client to use with the protected application depending on the output from the security providers.

However, Devine discloses a protected resource is an application, said application including an application container (col 27, lines 15-22). Devine also discloses that his invention uses a GUI interface (col 2, lines 60-65), which reads on the use of callback and callback handlers as modern GUI systems uses callback programming styles. Devine discloses on Figure 6 a username and password login interface. Further, Devine discloses that the services available to a user once the user logs in depend on the subscription of the user (col 3, lines 32-42). These teachings by Devine read on the above limitations that were not met by Wiederhold.



Art Unit: 2135

In light of the above teachings by Devine, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified Wiederhold's invention according to the limitations recited in claim 18. One of ordinary skill would have been motivated to incorporate Devine's teachings as he discloses that his teachings would allow for the use of a GUI interface to allow easy and convenient access from the user's perspective (col 2, lines 60-65).

**Claims 2 and 19:**

Wiederhold further discloses said application interface mechanism includes an application container for reading an application deployment description and registering said deployment description within the security service (col 3, lines 37-46).

**Claims 5 and 22:**

Wiederhold further discloses:

1. Defining an access policy via a plurality of access decision mechanisms within said security service (col 3, lines 37-45; fig 3, item 100; and fig 4, item 200).
2. Determining at each access decision mechanism a contributory decision to permit, deny, or abstain from said access request (col 5, 1<sup>st</sup> paragraph).

The examiner has interpreted "access decision mechanisms" as broadly as reasonable to include any rule, procedure, device, data structure, or function that is used by the security service to define an access policy.

**Claims 6 and 23:**

Art Unit: 2135

Wiederhold further discloses transferring via said access controller said access request to said plurality of access decision mechanisms, and combining contributory decisions into an overall decision by the security service to permit or deny said access request (col 3, lines 37-64).

**Claims 7 and 24:**

Wiederhold further discloses said contributory access decision mechanisms represent a business function related access policy (col 3, lines 37-64 and col 5, lines 11-16). The examiner has interpreted "business function related access policy" to mean any sort of access policy as any access policy can affect the way a business operates.

**Claims 8 and 25:**

Wiederhold further discloses access decisions may be added to the security service to reflect changes in the access policy (col 5, lines 34-41).

**Claims 9 and 26:**

Wiederhold further discloses said access decision mechanisms are used to define an entitlement for said client to access said protected resource (col 4, last paragraph).

**Claims 10 and 27:**

Wiederhold further discloses a deny or abstain by any one of said access decision mechanisms cause the security service to deny the access request (col 5, 1<sup>st</sup> paragraph and col 6, lines 5-10).

**Claims 11 and 28:**

Wiederhold further discloses an abstain by any one of said decision mechanisms does not cause the security service to deny the access request (col 5, 1<sup>st</sup> paragraph).

**Claims 12 and 29:**

Wiederhold further discloses auditing via said audit mechanism the determinations of said plurality of access requests (col 5, last paragraph and col 6, lines 1-2).

**Claim 13:**

Wiederhold further said resource interface includes passing requests via an interface mechanism to or from a protected resource (col 5, lines 28-31 and col 5, lines 56-61).

**Claim 30:**

Wiederhold further disclose said step of communicating the request includes passing requests via an interface mechanism to or from the protected resource (col 5, lines 28-31 and col 5, lines 56-61).

**Claims 15 and 32:**

Wiederhold discloses said interface mechanism includes a security provider interface (col 4, last paragraph).

The examiner has interpreted a "security provider interface" as any mechanism which allows a user or application to access the resource in secure manner. In the case of Wiederhold's invention, the security service itself is the security provider interface as it filters the results of an access query to disclose only the parts of a secure resource that a user or application has proper entitlement to have.

**Claims 16 and 33:**

Wiederhold does not disclose said interface mechanism is included as a plug-in in said resource interface. However, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Wiederhold and Devine's combination invention so that the interface mechanism is included as a plug-in in the resource interface as doing so would increase the scalability of the invention. If one were to implement the invention using Java and as a web application, Java itself is a plug-in for various web browsers, therefore any interface mechanism employed using Java would have to be a plug-in by nature. Note Devine discloses that his invention uses Java and Java applets (col 3, lines 3-8). Therefore, the limitation recited in claims 16 and 33 is obvious to the combination invention of Wiederhold and Devine.

**Claims 17 and 34:**

Wiederhold further discloses making a decision on whether to permit or deny a response to said access request from said protected resource to said client (col 4, last paragraph).

**Claim 35:**

Wiederhold discloses a method for determining a user entitlement to access protected resources in a secure environment, comprising:

1. Receiving an access requests from a user application to access a protected resource (fig 2 and col 4, last paragraph), by invoking a security service with said access request (fig 2 and col 3, lines 22-26).

2. Determining a user entitlement to access said protected resource (col 3, lines 37-45).
3. Making a decision at said security service based on said user entitlement to permit or deny said access request (col 5, 1<sup>st</sup> paragraph).
4. The steps of either:
  - a. Communicating a permitted access request to said protected resource (col 5, 1<sup>st</sup> paragraph), or
  - b. Denying a denied access request to said protected resource (col 5, 1<sup>st</sup> paragraph).

Wiederhold does not disclose invoking a security service with said access request **and a callback**. Wiederhold also does not explicitly disclose wherein said determining includes polling a plurality of security providers that may be plugged into the security service, and wherein the security providers use a callback handler to request context information from the application container for the request.

However, Wiederhold discloses that his invention is to provide a portal which can collaborate with existing security technologies (col 4, lines 7-14). Wiederhold further discloses security rules which can be plugged into his security system (col 5, lines 34-51). Wiederhold discloses that to access a resource, the query for the resource must pass all the rule requirements (col 6, lines 5-10). These teachings by Wiederhold read on polling a plurality of security providers that may be lugged into the security service.

Art Unit: 2135

The examiner believes that both the security rules and existing security technologies are security providers.

Further, Devine discloses a protected resource is an application, said application including an application container (col 27, lines 15-22). Devine also discloses that his invention uses a GUI interface (col 2, lines 60-65), which reads on the use of callback and callback handlers as modern GUI systems uses callback programming styles. Devine discloses on Figure 6 a username and password login interface. Further, Devine discloses that the services available to a user once the user logs in depend on the subscription of the user (col 3, lines 32-42). These teachings by Devine read on invoking a security service with said access request **and a callback** and the security providers use a callback handler to request context information from the application container for the request.

In light of the above, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified Wiederhold's invention using Devine's teachings according to the limitations recited in claim 35. One of ordinary skill would have been motivated to do so for the same reasons given in claim 1.

**Claim 36:**

Wiederhold does not explicitly disclose if said request is permitted said entitlement also determines a type of access available to the user of said protected resource. However, the examiner asserts that the limitation is well known in the art of security, i.e. once a user is granted access to a resource, it is common to also determine the level of access the user has for that resource, such as read-only or read-

Art Unit: 2135

write access. Further, Wiederhold discloses that existing security technologies are used to define who is allowed access to what, how, and when (col 4, lines 7-14).

It would have been obvious to one of ordinary skill to further modify Wiederhold and Devine's combination invention according to the limitation recited in claim 36. One of ordinary skill would have been motivated to do so as it would allow the security system to control the level of user access to a resource, i.e. how and when a resource may be accessed.

**Claim 37:**

Wiederhold further discloses said type of access includes any of view, modify, delete, or copy, any part or all of said protected resource (col 6, lines 19-32). View, modify, delete, or copy, any part or all of a resource are the types of functions normally performed on a resource when performing database queries.

**Claim 38:**

Wiederhold further discloses said user entitlement can be communicated from a first security realm to a second security realm (col 5, 1<sup>st</sup> paragraph). The examiner has interpreted a security realm as any individual portion of the overall system. In this case, the security mediator, security officer, protected resource, and client are all separate security realms.

**Claim 39:**

Wiederhold further discloses additional information from a first security realm can be used to modify the user entitlement, prior to communicating information about said

Art Unit: 2135

user entitlement from said first security realm to said second security realm (col 5, 1<sup>st</sup> paragraph).

Claims 3-4 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiederhold (US 6,226,745) and in view of Devine et al (US 6,606,708) and further in view of javaworld.com.

**Claims 3 and 20:**

Wiederhold does not disclose said application container is an Enterprise Java Bean container. However, javaworld.com discloses that one of the advantages of using an Enterprise Java Bean as a container is that an application would have almost transparent scalability (EJB advantages, item 3). As Wiederhold discloses that his/her invention could be used in a variety of environments from insurance companies, hospitals, and a military setting, it would be obvious to one of ordinary skill in the art at the time of the applicant's invention to use an Enterprise Java Bean container as this would allow the combination invention of Wiederhold and Devine to be scaled appropriately and easily for what ever type of environment it needs to operate.

**Claims 4 and 21:**

Wiederhold does not disclose said application container is a WebApp container. The examiner has interpreted WebApp to be the same thing as a web or Internet application and a WebApp container as a container which uses or runs on the web or Internet. Given that it would have been obvious to one of ordinary skill in the art at the



Art Unit: 2135

time of the applicant's invention to use Java technology in Wiederhold and Devine's combination invention because of the advantages disclosed by javaworld.com (EJB advantages), it would also have been obvious that the application container can also be a WebApp container as Java is platform independent and commonly used in web or Internet based applications. Wiederhold discloses that his invention can be used by groups of people not normally found close together such as a hospital staff with an insurance company staff, it would have been obvious to use the Internet as a medium for sharing information and data between the various user groups. Since the Internet is used as the communication medium, it would be obvious to use a WebApp as the application container in Wiederhold and Devine's combination invention to ensure data proper data privacy between the various groups as seen in Fig. 1 of Wiederhold.

Claims 14 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiederhold (US 6,226,745) and in view of Devine et al (US 6,606,708) and further in view of javaworld.com and java.sun.com.

**Claims 14 and 31:**

Wiederhold does not disclose wherein said interface mechanism includes a Java J2EE security interface. However, as pointed out already, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to use Enterprise Java Bean technology with Wiederhold and Devine's combination invention. Further, according to java.sun.com, Enterprise Java Beans technology is "the server-

Art Unit: 2135

side component architecture for the Java 2 Platform, Enterprise Edition (J2EE) platform” (java.sun.com, 1<sup>st</sup> paragraph). Therefore, it would have also been obvious to one of ordinary skill in the art at the time of the applicant's invention to make the interface mechanism include a Java J2EE security interface as using Enterprise Java Bean/J2EE technology would make the invention more flexible in terms of scalability.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blewett (US 5,551,040) discloses modern GUI systems uses callback programming style.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2135

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is 571-272-7962. The examiner can normally be reached on 8:00am-4:30pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PP

*H.S. B*  
Primary Examiner  
Art Unit 2135